

**WHAT IS CLAIMED IS:**

1. A method of accommodating code collisions from multiple  
2 SAW identification tag coded response pulses, comprising:  
3 separating probable candidates by time-domain;  
4 classifying said probable candidates by code-division  
5 separation;  
6 employing known coded identification signals to adjust said  
7 probable candidates; and  
8 correlating said multiple SAW identification tag coded  
9 response pulses to identify said probable candidates for further  
10 processing.

2. The method as described in Claim 1 further comprising  
2 focusing an interrogation pulse to within a defined space.

3. The method as described in Claim 1 wherein said  
2 correlating is further comprised of storing said multiple SAW  
3 identification tag coded response pulses in a database for further  
4 processing.

4. The method as described in Claim 1 wherein said  
2 correlating is further comprised of filtering said multiple SAW  
3 identification tag coded response pulses for matching signals.

5. The method as described in Claim 1 further comprising  
2 subtracting certain known coded identification signals from said  
3 probable candidates.

6. The method as described in Claim 1 wherein said known  
2 coded identification signals include known signal templates.

7. The method as described in Claim 1 wherein said time-  
2 domain is based on a hierarchical order.

8. The method as described in Claim 7 wherein said  
2 hierarchical order is from a general object classification to a  
3 specific object included within said general object classification.

9. The method as described in Claim 1 further comprising  
2 error-checking said SAW identification tag coded response pulses.

10. The method as described in Claim 1 wherein said  
2 separating, classifying, employing, and correlating are in a pre-  
3 determined sequence.

11. A method of identifying a unique SAW identification tag  
2 coded response pulse for further processing from among multiple SAW  
3 identification tag coded response pulses, comprising:  
4 separate said multiple SAW identification tag coded response  
5 pulses by time-domain to identify probable candidates;  
6 classify said probable candidates by code-division;  
7 employ known coded identification signals to adjust said  
8 probable candidates; and  
9 correlate said multiple SAW identification tag coded response  
10 pulses to identify said probable candidates for further processing.

12. The method as described in Claim 11 further comprising  
2 focusing an interrogation pulse to within a defined space.

13. The method as described in Claim 11 wherein said  
2 correlate is further comprised of storing said multiple SAW  
3 identification tag coded response pulses in a database for further  
4 processing.

14. The method as described in Claim 11 wherein said  
2 correlate is further comprised of filtering said multiple SAW  
3 identification tag coded response pulses for matching signals.

15. The method as described in Claim 11 further comprising  
2 subtracting said known coded identification signals from said  
3 probable candidates.

16. The method as described in Claim 11 wherein said known  
2 coded identification signals include a known signal templates.

17. The method as described in Claim 11 wherein said time-  
2 domain is based on a hierarchical order.

18. The method as described in Claim 17 wherein said  
2 hierarchical order is from a general object classification to a  
3 specific object within said general object classification.

19. The method as described in Claim 11 further comprising  
2 error-checking said SAW identification tag coded response pulses.

20. The method as described in Claim 11 wherein said  
2 separate, classify, employ and correlate are in a pre-determined  
3 sequence.